



## DuPont Powder Coatings

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### Data Sheet

## Flamulit<sup>®</sup> HTC 245 ES

A DuPont thermoplastic powder coating

### Product

**FLAMULIT<sup>®</sup> HTC 245 ES** is a polyolefine based powder. It has an very good adhesion, good insulation properties, excellent protection against corrosion.

**FLAMULIT<sup>®</sup> HTC 245 ES** is applied by Tribo or Corona spraying on cold surface.

### Typical applications

**FLAMULIT<sup>®</sup> HTC 245 ES** has been specially developed for protection of tubes, fittings in corrosive environment and of fire extinguishers. The cathodic disbonding is lower than 20 mm, and after 1000 hours of salt spray exposition, the detachment along the cut is lower than 10 mm.

### Typical coating conditions

#### Recommended pre-treatment:

Standard degreasing with organic solvents or with alkaline detergents. Degreasing might be followed by phosphatation and passivation.

For increased mechanical adhesion sand blasting is recommended. A primer is not required.

#### Spraying procedure:

- Spray the powder with device connected to negative voltage [approx. 20 kV or less]. A weak airflow ensures efficient powder dispersion. To obtain a thick coating we recommended to reduce the voltage down towards zero
- Bake at 180 –220°C for 8 –15 min

*For more informations, see DuPont guidelines for Metal Coating procedures.*

#### External thermosetting coating (e.g. fire extinguishers)

This coating is applied subsequently. Curing conditions for the external layer depend on the type of product.

### Results

Smooth appearance coating.  
Coating thickness: 200-500 µm.

## Characteristics

General properties	Units	Methods	Values
Melting range	°C	Mettler TA 3000 DSC	123 to 126
MFI (190 °C/2.16kg)	g/10min	DIN 53735	18
Particle size	µm	DIN 53734	< 150
Brittle point	°C	DIN 53446	-40
Softening temperature (Vicat)	°C	ASTM D 1525	101
Elongation at break	%	DIN 53475	200
<b>Coating properties</b>			
Specific gravity of the coating	g/cm <sup>3</sup>	DIN 53479	0.93
Hardness Shore D		DIN 53505	56
Adhesion	N/cm	DIN 30670	> 40
Electric strength	kV/mm	DIN 53481	> 20
Ericksen static stamping	mm	ISO 1520	8
<b>Chemical resistance</b>			
Industrial acid solutions	very good		
Industrial alkaline solutions	very good		
Solvents	medium		
Mineral salt solutions	good		

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For Safety, Health, storage and handling recommendations as well as the disclaimer information, see the DuPont Metal Coating general guideline